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SIBR/*Aloe barbadenis* Mill.: A Review on Medicinal Utility from the Perspective of Unani Medicine

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Abstract

Aloe barbadensis Mill., *known as Sibr in Unani medicine, is a time-honored medicinal plant belonging to the family Liliaceae. Revered across cultures and healing systems, it has been extensively described in Unani literature under various names such as Elwa, Musabbar, and Ghikwar. This review aims to comprehensively explore the medicinal utility of Sibr from an Unani perspective while integrating evidence from modern pharmacognosy, phytochemistry, and pharmacology. Traditionally, the dried juice of the plant – classified into three types: Saqootri, Arabi, and Samhani – has been used for its potent purgative, deobstruent, anti-inflammatory, and wound-healing properties. Unani scholars have elaborated its temperament (hot and dry), therapeutic dosage, adverse effects, correctives (Musleh), and substitutes (Badal) in classical texts. Phytochemical studies reveal that Aloe barbadensis contains anthraquinone glycosides, aloin (barbaloin), aloe-emodin, polysaccharides, vitamins, and enzymes, which are responsible for its diverse pharmacological activities. Modern experimental studies support its traditional claims, demonstrating antioxidant, analgesic, antimicrobial, hepatoprotective, and immunomodulatory properties. Its effects on chronic constipation, non-healing ulcers, hemorrhoids, jaundice, and inflammatory conditions align with its classical Unani indications. The plant's wide ethnomedicinal applications across different systems highlight its therapeutic versatility. This review consolidates classical Unani knowledge and modern scientific findings to validate the historical use of Aloe barbadensis and emphasizes the need for further clinical studies and standardization of its formulations. Bridging traditional wisdom with contemporary evidence, Sibr continues to hold promise as a valuable phytomedicine in integrative healthcare systems.*

Keywords: Sibr, *Aloe barbadensis* Mill., Liliaceae, Elwa, Saqootri, Unani medicine

INTRODUCTION

The drug consists of the dried juice of *Aloe barbadensis* Mill., a member of the family Liliaceae. The term "aloe" is believed to have originated from the Arabic word *alloch*, meaning a shining bitter substance [1]. In Hindi, it is known as *elwa* or *ailwa*, terms that appear linguistically related to the Greek word *axon*. Historical accounts suggest that aloe preparations were first developed by the Arabs. Although it is not mentioned by early authorities, such as Hippocrates and Theophrastus, both Dioscorides and Pliny the Elder were familiar with the plant and its medicinal properties [2]. Elva Plant & Dried aloe pictures given in Figures 1 and 2. Abu Hanifa (9th century CE) described the plant as having thick leaves and yellow flowers, from which the substance known as *sibr* (aloes) is obtained. Several Arabian and Persian scholars noted that the finest quality of aloe was produced in Socotra. Historical records state that Alexander the

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Great, following Aristotle's advice, seized the island of Socotra to secure the aloe supply and established a Greek colony there to cultivate the plant systematically [2].

In traditional practices, natives in the Congo region of Africa reportedly used aloe leaf mucilage to reduce perspiration and mask body odor. Additionally, historical sources mention the use of *Aloe barbadensis* combined with burnt alum for healing sore eyes [1]. Vernacular Names given in Table 1.

Figure 1. Elva plant.

Figure 2. Elva (Dried aloe).

Table 1. Vernacular Names [3–9].

Language	Vernacular Names
English	Aloe, Common Indian Aloe, Burn Plant, Elephant's Gall, First Aid Plant, etc. [5].
Arabic	Musabbar, Sibr [6, 7].
Hindi	Ghigwara, Ghikumari, Gwarpatha, Elva [6–8].
Sanskrit	Kumarirasambhav, Sahasara, Ghritkumari [7].
Persian	Darakht-e-Sinn, Sibr, Shabyar [6, 7, 9].
Syrian	Sebana [9].
Turkish	Azwa [9].
Urdu	Musabbar, Ailva, Sibr, Ghikwar [7].

Scientific Classification [7]

- *Kingdom:* Plantae.
- *Phylum:* Tracheophyta.
- *Order:* Asparagales.
- *Family:* Asphodelaceae (formerly Liliaceae).
- *Genus: Aloe*.
- *Species: Aloe arborescens*, *Aloe marlothii*, etc.

MATERIAL AND METHODOLOGY

Classical Unani literature related to *Sibr* (*Aloe barbadensis* Mill.) including its temperament, medicinal properties, and traditional uses was reviewed. Additionally, modern pharmacognostical, phytochemical, and pharmacological data were sourced from databases such as PubMed, ScienceDirect, Wiley Online Library, Google Scholar, and ResearchGate.

BOTANICAL DESCRIPTION [4, 8, 10–13]

Habitat and Distribution

Of the four species introduced to India, *Aloe barbadensis* Mill. is now naturalized across most parts of the country, especially along the coastal regions of Maharashtra, Gujarat, and South India [11–13].

Unani Description (Mahiyat)

Unani medicine classifies *Sibr* into three varieties:

- *Saqootri:* Best quality; saffron-colored when diluted, fragrant like *Murmakki*, brittle, and free of grit [8, 9, 14–17].
- *Arbi:* Intermediate quality; duller, lighter, and less shiny; mainly used externally [8].
- *Samhani:* Poor quality; hard with an unpleasant odor [8, 9, 16].

The dried juice is further categorized into *Ramli* and *Kabdi* types. The best is non-sticky, shiny, red, bitter, and brittle. Adulterants, like *Aqaqia*, reduce bitterness and shine [9].

General Botanical Features

- *Aloe barbadensis* is a succulent, perennial herb with a short stem.
- *Leaves:* 30–60 cm, thick, lanceolate, with spiny margins.
- *Flowers:* Yellow/orange, pendulous, arranged in dense racemes [6, 18, 19].
- *Fruit:* A loculicidal capsule.

PROPERTIES IN UNANI CLASSICAL TEXTS [12, 20–27]

- *Temperament (Mizāj):* Hot and dry [8, 15–17, 20].
- *Parts Used:* Dried juice and leaf pulp [8, 14, 18].
- *Dosage:* 1 *misqal* (~4.5 g); standard range: 1.75–5 g [13, 16, 21, 22].

Adverse Effects

- Irritates liver, rectum, intestines [17, 19–22].
- May cause diarrhea in winter [8].
- High doses: dysentery, stomach weakness, abortion [17, 23, 24].

Correctives (Musleh)

- *Afsanteen*, *Maul Asal*, *Muqil*, *Mastagi*, *Kateera*, *Gule Surkh*, *Shehed* [8, 13, 17, 20–22, 25].

Substitutes (Badal)

- *Raasaut:* (2x dose) for ulcers [21, 26, 27].
- *Turbed:* (half dose) for diarrhea [21].
- *Formulations: Zimade Jalinoos*, *Majoone Antaki*, *Habbe Mudir*, *Habbe Ghafis* [6].

PHYTOCHEMICAL CONSTITUENTS (FIGURE 3) [4, 7, 11, 13, 28–30]

- *Major Compounds:* Anthraquinone glycosides (e.g., Aloin – barbaloin, β-barbaloin, isobarbaloin)
- *Other Constituents:* Aloe-emodin, iso-emodin, tannins, sterols, resins, organic acids, saponins, enzymes (e.g., cyclooxygenase), vitamins, and minerals.
- *Leaf Mucilage:* Contains glucose, galactose, mannose, galacturonic acid, a protein with 18 amino acids, mucopolysaccharides, choline, glucosamine, etc.

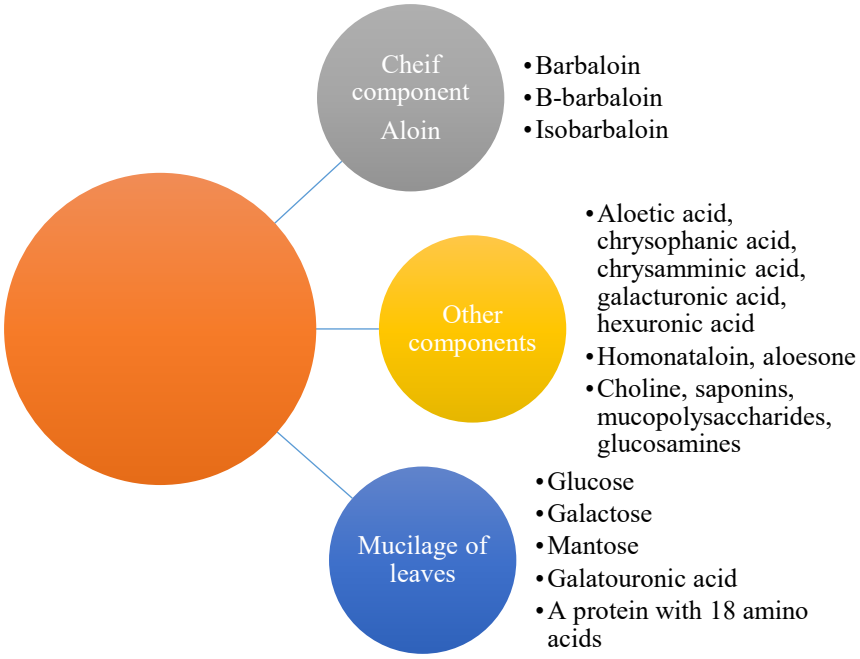

Figure 3. Phytochemical components in SIBR/*Aloe barbadenis* Mill. (Liliaceae).

THERAPEUTIC USES IN UNANI

Medicinal Action **(**Af'al) & Medicinal use **(***Istimālāt***)** are given in Tables 2 and 3.

Table 2. Medicinal actions (Af'al).

Unani Actions	**References**	**Correlated Ethnobotanical Actions**	**References**
Mushil-e-Sauda (Black bile purgative)	[8–11, 24]	Purgative in large doses	[15–16, 31–34]
Mushil-e-Balgham (Phlegmagogue)	[16, 17, 19, 29]	Emmenagogue	[31–35]
Mufatteh Sudade Jigar (Liver deobstruent)	[9–11, 21–28]	Anthelmintic	[29–31]
Munaqqi-e-Dimāgh (Brain cleanser)	[25]	Cathartic	[30]
Munaqqi-e-Ḥawās (Sensory cleanser)	[25]	Nephrotonic	[35]
Muqawwi-e-Quwwat-e-Samā' (Auditory tonic)	[25]	Pancreotonic	[35]
Mohallil-e-Warm (Anti-inflammatory)	[25–27]	Anti-inflammatory	[35]
Mukhrij-e-Kirm (Vermifuge)	[25,31]	Vermifuge	[35]
Qābiẓ (Astringent)	[7, 9, 11, 12]	Hypoglycaemic	[35]
Mujaffif-e-Badan (Desiccant)	[8–10]	Dermulent	[35]
Mudammil-e-Qurūḥ (Wound healer)	[8–12]	Hepatotonic	[35]
Muqawwi-e-Qalb (Cardiotonic)	[8]	Sunscreen	[35]
Nāfi' fī Awjā'-e-Mafāṣil (Joint pain reliever)	[8,12, 20]	Diuretic	[35]
Mukhrij-e-Akhlāṭ-e-Fāsida (Expels morbid humors from GI tract and joints)	[9–11, 20]	Antiallergic	[35]
Musakkīn-e-Alam (Analgesic)	[20]	Analgesic	[35]
Muqawwi-e-Mi'da (Stomach tonic)	[10]	Stomachic in small doses	[18–22, 35]
Muqawwi-e-Baṣarat (Vision enhancer)	[9, 10, 30]	Cholagogue	[29]
Mukhrij-e-Ṣafrā' (Expels yellow bile)	[12]	–	–
Munawwim (Sedative)	[8, 9]	–	–
Jādhīb-e-Balgham-e-Mafāṣil (Absorbs phlegm in joints)	[9]	–	–
Munaqqi-e-Mi'da wa Am'ā (GI cleanser)	[9]	–	–
Mushtaḥī-Ṭa'ām (Appetizer)	[20]	–	–

Table 3. Medicinal uses (*Istimālāt*).

Indications in Unani	References	Correlated Ethnobotanical Uses	References
Muzmin Qabz (Chronic constipation)	[31]	Constipation	[32, 33, 35]
Ghayr Mundamil Qurūḥ (Non-healing ulcers)	[8, 9]	Ulcers	[35]
Bawāsīr (Hemorrhoids)	[20]	Piles, rectal fissures	[32, 33, 36]
Amrāz-e-Mi'da (Stomach disorders)	[20]	Dyspepsia	[36]
Iltiḥāb (Inflammations)	[9, 20]	Painful inflammations	[32, 36]
Bafa wa Balkhōra (Dandruff, alopecia)	[9, 11, 20]	Seborrhoea	[35]
Warame Miqad wa Ahlīl (Rectal and penile inflammations, urethral ulcers)	[7, 8]	Rectal fissures	[29]
Iḥtibās-e-Ḥaiż (Amenorrhoea)	[9, 22]	Amenorrhoea	[25, 29, 34]
Scar marks	[8]	Colic and pneumonia in infants	[12]
Yarqān (Jaundice)	[37]	Intestinal worms	[13]
Ṣudā' (Headache)	[8, 9, 12–14]	Atherosclerosis	[35]
Expels phlegm and yellow bile from stomach	[8]	Hyperglycemia	[35]
Bruise over eyes	[9, 11, 20]	Tuberculosis	[31, 35]
Dislocation	[20]	Apoplexy	[13]
Kharish (Itching)	[20]	–	–
Malīkholiyā (Melancholia)	[9, 12, 30]	–	–

PHARMACOLOGICAL ACTIONS

Antioxidant Activity [36–38]

The exudates from the leaves of *Aloe barbadensis* have been studied for their effects on oxidative stress and antioxidant status in streptozotocin-induced diabetic rats. In untreated diabetic rats, a significant reduction in the activity of scavenging enzymes, such as superoxide dismutase (SOD), was observed, accompanied by an increase in oxidative tissue damage markers like plasma malondialdehyde (MDA).

However, treatment with *Aloe barbadensis* exudates at a dose of 150 mg/kg resulted in a notable increase in SOD activity and a significant decrease in lipid peroxidation products. These findings suggest that hyperglycemia exacerbates oxidative stress and that the exudates of *Aloe barbadensis* possess antioxidant properties, as demonstrated by the enhancement of scavenging enzyme activity and the reduction of oxidative damage markers.

Analgesic Activity [39]

The analgesic effects of an aqueous extract of *Aloe vera* (*Aloe barbadensis*) were evaluated using male Wistar rats weighing 150–200 grams. The animals were divided into five groups (n = 6) receiving different treatments. Analgesic activity against both visceral and somatic pain was assessed using the radiant heat method, hot plate method, and the writhing test.

Aloe vera was administered orally at a dose of 300 mg/kg daily for 14 days. Biochemical analyses of blood and histopathological examinations of the gastrointestinal mucosa were conducted following the treatment period. The aqueous extract exhibited significant analgesic effects compared to the control group, with highly significant results in the radiant heat method ($p < 0.001$) and notable effects in the hot plate method ($p < 0.05$). The writhing test showed a maximum inhibition of 51.17% at the 300 mg/kg dose. Importantly, no adverse effects were observed on renal or hepatic functions, and histological studies confirmed the preservation of normal gastrointestinal architecture, indicating the safety of *Aloe vera* in this regard.

Antimicrobial Activity [40]

The antimicrobial potential of *Aloe vera* gel and leaf extracts was evaluated against several pathogens, including *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Trichophyton mentagrophytes*, *T. schoenleinii*, *Microsporum canis*, and *Candida albicans*. After extracting the gel, the leaf material was further extracted using ethanol. Antimicrobial activity was assessed by measuring zones of inhibition.

The antimicrobial susceptibility tests revealed that both the gel and the leaf extract inhibited the growth of *S. aureus*, with inhibition zones of 18.0 mm and 4.0 mm, respectively. Interestingly, only the gel showed inhibition against *T. mentagrophytes* (20.0 mm), whereas the leaf extract demonstrated inhibitory effects against *P. aeruginosa* and *C. albicans*. These findings support the traditional use of *Aloe vera* gel and leaf in treating infections.

FUTURE PERSPECTIVE AND CONCLUSION

The medicinal significance of *Sibr* (*Aloe barbadensis* Mill.) reflects a profound synthesis of traditional knowledge and modern scientific validation. In Unani medicine, it has been long recognized for its potent purgative, anti-inflammatory, and wound-healing properties, rooted in a detailed understanding of temperament and humoral pathology. Classical scholars meticulously documented its therapeutic applications, potential adverse effects, and appropriate corrective measures to optimize its efficacy. Contemporary phytochemical and pharmacological research corroborate these traditional claims, additionally highlighting its antioxidant, antimicrobial, and analgesic activities. Serving as a bridge between classical and modern medical paradigms, *Aloe barbadensis* exemplifies the holistic principles of Unani medicine while aligning with current biomedical insights. This convergence underscores the need for further clinical studies and the standardization of its preparations to facilitate its integration into contemporary healthcare systems.

REFERENCES

1. Kokate CK, Purohit PA, Gokhale BS. Pharmacognosy. Pune: Nirali Prakashan; 2009. p. 8.23–8.30, 9.4–9.5, 11.56–11.58, 11.103–11.105, 13.63–13.65.
2. Dymock W, Warden CJH, Hooper D. Pharmacographia Indica: A history of the principal drugs of vegetable origin. New Delhi: Srishti Book Distributors; 2005. Vol. 3. p. 166–176, 420–425, 467–476, 586–592.
3. Weber H, Holme I, Amlie E. The natural course of acute sciatica with nerve root symptoms in a double-blind placebo-controlled trial evaluating the effect of piroxicam. Spine (Phila Pa 1976). 1993;18(11):1433–8.
4. Valat JP, Genevay S, Marty M, Rozenberg S, Koes B. Sciatica. Best Pract Res Clin Rheumatol. 2010;24(2):241–52. doi:10.1016/j.berh.2009.11.005.
5. Fetrow CW, Avila JR. The complete guide to herbal medicines. Springhouse (PA): Springhouse Corporation; 2000. p. 21–23, 210–211, 374–375.
6. Kirtikar KR, Basu BD. Indian medicinal plants with illustrations. Dehradun: Oriental Enterprises; 2005. Vol. 10. 2nd ed. p. 3363–3367, 3457–3459, 3485.
7. Anonymous. The Unani Pharmacopoeia of India. New Delhi: CCRUM; 2007. Part 1, Vol. 1. p. 3–4, 32–33, 82–83, 88–89.
8. Ibn Sina. Al Qanoon. New Delhi: Idarah Kitab-us-Shifa; year not mentioned. Vol. 2. p. 406, 426, 435, 437.
9. Ibn Baitar. Aljame al Mufradat al Advia wa al Aghzia. Urdu translation by CCRUM. New Delhi: Dept of AYUSH, Ministry of Health & Family Welfare, Govt. of India; 1999. Vol. 3. p. 96–98, 170–175, 275–276, 377–380.
10. Adams JC, Hamblen DL. Outline of orthopaedics. 13th ed. Edinburgh: Churchill Livingstone; 2001. p. 198–205.
11. Tortora GJ, Derrickson B. Principles of anatomy and physiology. 11th ed. Hoboken (NJ): John Wiley & Sons Inc.; 2008. p. 456.

12. Magee DJ. Orthopedic physical assessment. 5th ed. Philadelphia: Saunders; 2007. p. 6, 9, 559.
13. Anonymous. The Wealth of India. New Delhi: Council of Scientific and Industrial Research; 2003. Vol. 1. p. 191–193.
14. Hakeem MA. Bustanul Mufradat. New Delhi: Idarah Kitab-us-Shifa; 2002. p. 60, 78–79, 106–107, 119–120, 358, 503.
15. Majoosi IA. Kamilus Sana'a. New Delhi: Idarah Kitab-us-Shifa; 2010. Vol. 2. p. 155, 159, 165.
16. Baghdadi IH. Almukhtarat fit Tibb. Part II. Urdu translation by CCRUM. New Delhi: Dept of AYUSH, Ministry of Health & Family Welfare, Govt. of India; 2005. p. 118, 126, 209, 228–229, 239–240, 248.
17. Gazrooni MS. Alsadidi. Lucknow: Matba Munshi Naval Kishore; 1311 H. p. 159–163, 190, 200–201.
18. Anonymous. The Wealth of India. New Delhi: Council of Scientific and Industrial Research; 2003. Vol. 1. p. 191–193.
19. Prajapati ND, Purohit SS, Sharma AK, Kumar T. A handbook of medicinal plants: A complete source book. Jodhpur: Agrobios Publication India; 2009. p. 33, 32, 105–106, 161, 404, 508, 552.
20. Samarkhandi N. Moalijath Sharh-e-Asbab. Translated by Kabeerudeen M. New Delhi: Idarah Kitab-us-Shifa; 2009. Part 1. p. 175–177.
21. Chughtai GM, Chughtai F. Rehnumae Aqaqeer. New Delhi: Aijaz Publishing House; 2004. Vol. 1. p. 90–99, 530–534.
22. Ghani N. Khazainul Advia. New Delhi: Idarah Kitab-ul-Shifa; 2002. 1st ed. p. 113, 175–178, 308–312, 335–336, 861–862, 869–870, 1231–1233, 1355–1356.
23. Khan HA. Majmaul Behrain. Lucknow: Matba Munshi Naval Kishore; year not mentioned. p. 134, 152, 154, 157, 162.
24. Khan HA. Majmaul Behrain. Lucknow: Matba Munshi Naval Kishore; year not mentioned. p. 134, 152, 154, 157, 162.
25. Haleem MA. Mufradate Azizi. New Delhi: CCRUM, Dept of AYUSH, Ministry of Health & Family Welfare, Govt. of India; 2009. p. 17, 21, 26, 29, 33, 36, 52, 54, 55, 66, 85, 91, 102, 115, 117.
26. Tabri AR. Firdaus ul Hikmat. Deoband: Faisal Publication; 2002. p. 358–359, 362–366.
27. Singh R, Mehta A, Mehta P, Shukla K. Anthelmintic activity of rhizome extracts of Curcuma longa and Zingiber officinale (Zingiberaceae). Int J Pharm Pharm Sci. 2011;3(2):236–7.
28. Barnes J, Anderson LA, Phillipson JD. Herbal medicines. 3rd ed. London: RSP Publishing; 2007. p. 48–49, 293–298.
29. Anonymous. The Wealth of India. New Delhi: Council of Scientific and Industrial Research; 2003. Vol. 1. p. 191–193.
30. Chopra RN. Glossary of Indian medicinal plants. New Delhi: National Institute of Science Communication and Information Resources, CSIR; 2002. p. 13, 33, 46–47, 73, 194, 242, 261.
31. Tariq MNA. Taj ul Mufradat. New Delhi: Idarah Kitab-us-Shifa; 2010. p. 17–21, 39–41, 105–107, 123, 460, 659–661, 677.
32. Chopra RN. Glossary of Indian medicinal plants. New Delhi: National Institute of Science Communication and Information Resources, CSIR; 2002. p. 13, 33, 46–47, 73, 194, 242, 261.
33. Evans WC. Trease and Evans' pharmacognosy. New Delhi: Elsevier (Reed Elsevier India Pvt Ltd); 2002. p. 37–38, 52, 226, 240–242, 353–371, 471, 474.
34. Prajapati ND, Kumar U. Agro's dictionary of medicinal plants. Jodhpur: Agrobios (India); 2003. p. 19, 44, 60, 88, 257, 343, 382.
35. Duke JA. Handbook of medicinal herbs. 2nd ed. India: Replika Press Pvt. Ltd; 2002. p. 17–18, 45, 98–99, 180–181, 327–329, 682–683.
36. Kirtikar KR, Basu BD. Indian medicinal plants with illustrations. Dehradun: Oriental Enterprises; 2003. Vol. 10. 2nd ed. p. 3363–3367, 3457, 3457–3459, 3485.
37. Mishra LC. Scientific basis for Ayurvedic therapies. Boca Raton: CRC Press; 2003. p. 195.
38. Nwanjo HU. Antioxidant activity of the exudates from Aloe barbadensis leaves in diabetic rats. Biokemistri. 2006;18(2):77–81.

39. Ghosh AK, Banerjee M, Mandal TK, Mishra A, Bhowmik MK. Analgesic efficacy and adverse effects of Aloe vera in Wistar rats. Pharmacologyonline. 2011;1:1098–1108.
40. Agary OO, Olaleye MT, Michael CO. Comparative antimicrobial activities of Aloe vera gel and leaf. Afr J Biotechnol. 2005;4(12):1413–4.

